

ABSTRACT OF THE DISCLOSURE

There is provided a power rate enhancement circuit for a power amplifier in a dual mode mobile phone including an RF power amplifier for amplifying an RF input
5 signal, a duplexer connected to an antenna, and an isolator connected to the duplexer.

The power enhancement circuit also comprises: a CDMA matching circuit connected to
an output end of the RF power amplifier, for matching an output impedance of the RF
power amplifier in a CDMA mode of operation; an AMPS matching circuit connected to
the output end of the RF power amplifier, for matching the output impedance of the RF
10 power amplifier in an AMPS mode of operation; and an RF switch for selecting the
CDMA matching circuit or the AMPS matching circuit according to a mode control
signal. The CDMA matching circuit comprises an inductor connected between the
output end of the RF power amplifier and the isolator. The AMPS matching circuit
comprises a capacitor connected between the RF switch and a contact point formed
15 between the inductor and the isolator.